

06 October 2017

Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney NSW 1235

Lodged online via: www.aemc.gov.au

Dear John,

ERC0208 Consultation Paper: Inertia Ancillary Service Market

TransGrid fully supports efforts to maintain power system security and welcomes the opportunity to respond to the AEMC's consultation paper on the proposed Inertia Ancillary Service Market Rule change.

TransGrid is the operator and manager of the high voltage transmission network connecting electricity generators, distributors and major end users in New South Wales and the Australian Capital Territory. TransGrid's network is also interconnected to Queensland and Victoria, and is instrumental to an electricity system that allows for interstate energy trading.

TransGrid understands that the intent of the proposed market mechanism for inertia is to facilitate higher levels of inertia where they provide additional economic benefits, above the minimum threshold level of inertia determined via the recent Rule change on *Managing the rate of change of power system frequency*.

As the mix of generation in the NEM changes, it is possible to envisage markets for services such as firming capacity and system security to manage system strength and inertia. However, currently 85 per cent of the generation in the NEM provides inertia and system strength by default. TransGrid acknowledges that there is currently a short-term problem in South Australia, which needs resolving. However, given this context, and considering the complexity involved in designing an efficient market, TransGrid does not see the design and implementation of a market for these services being a short-term priority. NEM-wide solutions should not be rushed through to satisfy jurisdictional-specific issues, especially as they have long-term implications.

It is important to ensure, if a market-based mechanism is developed, it is tested to demonstrate that it provides the lowest long-term solution for consumers. Further, TransGrid is concerned with the narrowing of options without the necessary supporting analysis and consultation. Responsibility to provide inertia, alongside a performance based remuneration arrangement, allows for TNSPs' investments to be co-optimised to manage other obligations, such as system strength. Given this, a broader range of options should be considered further, such as the TNSP incentive scheme. These should also be tested against the market-based mechanism to ensure the most cost-efficient solution is selected.

TransGrid considers that the current focus should be on providing a resilient way to share the inertia and system strength that is concentrated in some parts of the NEM to other parts of the

NEM. Where economic, this could include route diverse AC interconnectors, intra-regional augmentations, and some forms of generation.

TransGrid has raised concerns in previous submissions about the recent Rule changes regarding obligations on TNSPs to manage system fault levels and minimum levels of inertia.¹ In our view it is more important to remedy these concerns, rather than add an additional mechanism such as an ancillary services market. As noted previously, TransGrid's concerns include:

- The lack of liability protections for TNSPs in relation to the new functions, which is inconsistent with existing National Electricity Law (NEL) provisions.
- A bias against TNSPs investing in lower cost and efficient long-term investment remains – given the timetable for specifying and amending inertia service requirements, the current Regulatory Investment Test for Transmission (RIT-T), and lack of incentives for TNSPs to provide ancillary services. While exemptions to the RIT-T process are allowed under certain conditions², a bias against efficient investment remains. Lowest cost long-term solutions may involve TNSPs investing in the asset base or providing a range of services, such as system strength and inertia. The current regulatory framework however, lacks incentives for TNSPs to provide these services as it does not provide a return to compensate for the risks taken, nor does it reward TNSPs for meeting performance based outcomes.
- Contracting for system security services under the current framework brings compliance and commercial risk for TNSPs, but little incentive, especially if materiality is high and/or there is an un-forecast step change in service requirements.
- Inertia requirements will be externally driven, service requirements could be unpredictable, and the costs may not be included in a revenue allowance. The obligation could arise on short notice (without time to undertake a RIT-T) and there is a risk the AER won't accept that the costs involved should be passed through.
- Costs recovered via pass-through arrangements have a cash flow impact. These costs are recovered up to two years after they are incurred.
- TNSPs will be exposed to greater cash fluctuations, and possible cash shortfalls, which need to be funded. As a result, TNSPs' levels of funding will need to be reconsidered, with either more cash retained in the business, or higher levels of headroom negotiated in debt funding. These changes would lead to higher costs for TNSPs than provided for in the current regulatory framework.

The design of an effective market for ancillary services is complex, and TransGrid considers it should be considered within the context of a whole-of-NEM market review. As noted above, the current focus should be on sharing existing inertia and system strength services throughout the NEM, and on ensuring that TNSPs have efficient incentives to meet the obligations placed on them.

In relation to the design features of the proposed ancillary service market, TransGrid notes it may not be appropriate to use NEM regional boundaries within which inertia may be required.

¹ AEMC 2017, Managing the rate of change of power system frequency, Rule Determination, 19 September 2017, Sydney.
AEMC 2017, Managing power system fault levels, Rule Determination, 19 September 2017, Sydney.

² AEMC 2017, Managing the rate of change of power system frequency, Rule Determination, 19 September 2017, Sydney, p7.

A key issue is whether a credible contingency (or protected event style contingency) could create an inertia shortfall on the other side of a regional boundary where there is insufficient interconnection between regions, or insufficient resilience within a region. As such we would question both regional inertia markets and the interregional settlements residue approach.

We recognise that this issue is complex and look forward to further consultation with the AEMC during this review, including more detailed discussions on the development of a market mechanism and potential implications for the energy sector. If you would like to discuss any matter raised in this submission, please contact Rebecca El-Khoury in the first instance on 02 9284 3299.

Yours sincerely,



Anthony Meehan
Executive Manager, Regulation